

### **REMARKS**

Claims 1-12 and 18-19 are pending in the present application. By this reply, claims 13-17 have been cancelled, claims 1-3 and 6-12 have been amended and claims 18-19 have been added. Claims 1, 6-7, 10 and 18-19 are independent.

The specification and claims have been amended to clarify the invention and to correct minor informalities according to U.S. patent practice. These modifications do not add new matter.

### **35 U.S.C. §112 & Double Patenting Rejection**

Claims 1-12 are rejected under 35 U.S.C. § 112, second paragraph, as being allegedly incomplete. Without acquiescing to the Examiner's allegations made in rejecting these claims, but to advance prosecution only, the word "writing" has been added to the claims according to the Examiner's suggestions. Thus, this rejection should be withdrawn.

Claim 17 is rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claim 20 of U.S. Patent Publication No. 2004/0120233. Without acquiescing to the Examiner's allegations made in rejecting this claim, but to advance prosecution only, claim 17 has been cancelled, rendering this rejection moot.

### **Rejections under 35 U.S.C § 102 and § 103**

Claims 1-3, 6-9 and 13-17 are rejected under 35 U.S.C. § 102(a) as being anticipated by Takano et al. (U.S. Patent No. 5,448,728). Claims 4-5 and 10-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takano et al. in view of Miyamoto et al. (U.S. Patent No. 5,867,455). These rejections, insofar as they pertain to the presently pending claims, are respectfully traversed.

According to an embodiment of Applicants' invention, after writing data requested to be overwritten into a replacement area of a write once optical disc, information on a last logical

sector number of the user data area is changed in accordance with this writing operation, and this information on the last logical sector number is recorded on the optical disc. According to another embodiment of Applicants' invention, the size of the outer spare area may be extended according to the size of the replacement-recorded area (into which data requested to be overwritten is recorded), and information on a last logical sector number of the user data area, which is changed according to the extension of the outer spare area, is recorded on the write once optical disc.

Without acquiescing to the Examiner's allegations made in rejecting these claims, but to advance prosecution only, the claims have been amended to further emphasize the above-noted distinguishing features of the present invention. For instance, independent claim 1 has been amended to recite, *inter alia*, "writing replacement-recording data, which is requested to be overwritten in a specified area of the disc where recording is completed..; and recording information on a last logical sector number of the user data area, which is changed in accordance with the replacement recording operation, in a management area of the disc" (emphasis added). Other independent claims 6, 7, and 10 have been amended to recite similar features in a varying scope. For instance, claim 6 recites "recording information on a last logical sector number of the user data area, which is changed in accordance with the extension of the outer spare area" and claim 7 recites "recording information on a last logical sector number of the user data area, which is changed in accordance with the determination of the extension of the outer spare area" (emphasis added). These features are neither taught nor suggested by Takano and Miyamoto, either taken singularly or in combination.

Particularly, Takano merely teaches searching the last recorded position and the non-recorded position on the optical disc, and then recording modified data in the next recordable position. See, e.g., Abstract, FIGs. 2, 5, 6a, 10b, 11 and 15 of Takano. However, Takano nowhere teaches or suggests "recording information on a last logical sector number of the user data area" as recited in independent claims 1, 6, 7 and 10, which is associated with the overwrite operation of a write once optical disc. Further, Takano is completely devoid of recording such information, which is changed in accordance with the writing operation or replacement-recording operation for data requested to be overwritten (e.g., claims 1 and 10), the extension of the outer

spare area (e.g., claim 6), the determination of the extension of the outer spare area (e.g., claim 7), etc.

Furthermore, Miyamoto does not overcome these deficiencies of Takano since Miyamoto is merely relied on for teaching multiple recording layers of a disc. Therefore, even if the references were combinable, assuming *arguendo*, the combination of references would still fail to teach or suggest at least the above-noted features of independent claims 1, 6-7 and 10. Accordingly, independent claims 1, 6-7 and 10 and their dependent claims (due to the dependency) are patentable over the applied references, and the rejections are improper and withdrawn.

#### **New Claims**

New apparatus claim 18 and new recording medium claim 19 contain similar features as the existing claims and are thus believed to be allowable at least for the same reasons that independent claims 1, 6-7 and 10 are allowable as discussed above. Accordingly, indication of allowance of new claims 18 and 19 is respectfully requested.

#### **CONCLUSION**

For the foregoing reasons and in view of the above clarifying amendments, the Examiner is respectfully requested to reconsider and withdraw all of the objections and rejections of record, and to provide an early issuance of a Notice of Allowance.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong (Registration No. 40,953) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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